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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/465,418	12/16/1999	GEOFFREY B. RHOADS	60075	8844

23735 7590 01/29/2004  
DIGIMARC CORPORATION  
19801 SW 72ND AVENUE  
SUITE 100  
TUALATIN, OR 97062

EXAMINER

DASTOURI, MEHRDAD

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 01/29/2004

17

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/465,418

Applicant(s)

RHOADS ET AL.

Examiner

Mehrdad Dastouri

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 and 18-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20-22 is/are allowed.
- 6) ☒ Claim(s) 1-5, 18, 19, and 23-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 27, 2003 has been entered.

### ***Response to Amendment***

2. Applicants' amendment filed October 27, 2003, has been entered and made of record.
3. 35 U.S.C. 112, first paragraph rejection of Claims 1-5, 14 and 18-28 has been withdrawn in view of Applicants' remarks indicated in Pages 4 and 5 of the After Final amendment filed on August 22, 2003.
4. 35 U.S.C. 112, second paragraph rejection of Claims 1-5 has been withdrawn in view of Applicants' amendment.
5. The After Final amendment filed on August 22, 2003, includes five attachments.
6. The amendment filed on October 27, 2003, includes 12 pages of attachments.

### ***Response to Arguments***

7. Applicants are respectfully referred to the response in the Final Office Action (Paper No. 11) and the Advisory Action (Paper No. 14) concerning their arguments regarding establishing a prima facie case of obviousness.

***Claim Rejections - 35 USC ,§ 103***

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russell et al., (hereinafter Russell), U.S. 5,905,248 and Mowry, Jr. (hereinafter Mowry), U.S. 5,951,055.

As per Claim 1, Russell teaches:

recognizing a document (transaction cards, other printed media, col. 2,11. 57-59) and, in response, directing (accessing) a web browser to a website related thereto (col. 2, lines 57-62). Although it is arguable that a transaction card (e.g., gift card, credit card) is equivalent to a security document because it performs substantially the same function in the same manner, and Russell teaches that other types of print media can be used to conduct financial transactions with his system (col. 20, line 23) with his system and that other security functions can be performed (col. 19, lines 49-50), Russell does not specifically teach recognizing a "security document". But Mowry does teach recognizing a security document with a hidden security image and a machine-readable code, col. 4, lines 53-55.

It would have been obvious to one of ordinary skill in the art to use the security document hidden images and machine-readable codes as the "other printed media" of Russell so as to provide another use of Russell's system, which is particularly useful because Russell teaches a hand-held version that could be used by merchant's and consumers not only to prevent unauthorized reproduction, but also to prevent passing

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off the unauthorized copy. Additionally, the system of Russell teaches that his system can be used to direct a user to information resources (col. 25, lines 7-14) in order to more effectively carry out the information-related transactions.

As per Claim 2, Mowry teaches:

presenting to a user a substitute ("pseudo originals") image from the website (col. 5, lines 7-10).

As per Claim 3, Russell teaches:

presenting a user with supplemental information ("particular type of information-based transaction") relating to the recognized security document, or to its permitted use, from the web site (col. 2, lines 56-60). Clearly, during an information-based transaction, information must be exchanged between the user and computer system being accessed.

As per Claim 4, Russell teaches that his system uses machine-readable barcodes (col. 8, lines 55-65) and does not specifically mention a digital watermark. However, Mowry teaches the use of digital glyphs. Therefore, Mowry teaches:

the use of recognizing a security document by a digital watermark encoded therewith (col. 1, lines 22-26, col. 4, lines 32-35, 53-54). Mowry also teaches that other information bearing elements other than digital glyphs can be encoded in the security document so long as it is not recognizable by the unaided human eye, which also serves the purpose of not detracting from the aesthetics of the security document. Preserving the aesthetics of the security document is also an objective of the applicant (See specification page 2, lines 9-11). Additionally, the specification states that the anti-

counterfeiting system markings can be added to existing documents as an ink marking (See specification page 2, lines 11-15) just like Mowry's digital glyphs.

As per Claim 5, Russell teaches:

a computer storage medium having instructions stored thereon for causing a computer to perform the method of claim 1 (Figure 1, element 6A, "client computer", col. 2, line 56).

10. Claims 18, 24-27 are rejected under 35 U.S. C. 103(a) as being unpatentable over Witschorik, U.S. 6,131,718 and Durst, U.S. 5,933,829.

As per Claim 18, Witschorik teaches:

recognizing (cot. 3, lines 40-44, Validation module 70 (see fig. 4) reads and writes security data on bill..., col. 5, lines 28-32, col. 6, lines 64-65, or alternatively, col. 8, lines 2-7) a government-issued security document (paper currency, col. 3, lines 25-27);

Witschorik teaches in fig. 1, element 40 a communications system that could be any public telephone network (Internet) connection-based protocols either dial-up or leased line connections (cot. 4, lines 47-54) to provide communications accessing a security computer 30 via a communications module 90 (see fig. 4) via any variety of conventional telecommunications network access devices (cot. 5, lines 38-40) to receive authentication data, Witschorik does not specifically state that he is accessing a website to receive such data. However, Durst teaches:

in response to recognition of such document, contacting a web site (col. 4, lines 65-67, col. 5, lines 39-53) that provides information regarding reproduction of the

document (col. 8, lines 35-40, determination as to whether which data should be sent back to the user).

Durst states that his system can be used with security information useful for completing secured transactions, and Witschorik teaches that his system responds to the read dollar serial number and the embedded magnetic security code (col. 7, lines 9-14).

It would have been obvious to one of ordinary skill in the art to use the website accessing system of Durst with the security code number validating system of Witschorik to eliminate counterfeiting by instantly confirming the authenticity of the exchanged dollar and to provide output messages to the user (fig. 4, element 80, col. 5, lines 36-37) regarding whether the dollar under test has been reproduced.

As per Claim 24, Witschorik teaches: the security document is a banknote (col. 1, lines 15-25). As per claim 25, Witschorik teaches: wherein recognizing is performed by a scanner (figure 1, element 50, col. 4, lines 55-58).

As per Claim 26, Witschorik teaches: wherein said recognizing is performed by driver software in the scanner (col. 8, lines 4-6).

As per Claim 27, Witschorik does not specifically teach that the recognition is done in the general purpose computer, But Durst teaches: wherein said recognizing is performed by a general purpose computer (col. 5, lines 37-45).

11. Claims 19, 23 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Witschorik and Durst as applied to Claim 18 above, and further in view of Gruhl et

al. (hereinafter Gruhl), Information Hiding to Foil the Casual Counterfeiter", Second International Workshop on Information Hiding, April 17, 1998.

Durst does not specifically state the type of website accessed. However, Durst does teach that the website accessed is related to the document scanned (col. 4, lines 66-67, col. 5, lines 54-60). Witschorik teaches that the web address is directly related to validating the dollar. Gruhl teaches an anticounterfeiting system.

As per Claim 19, Gruhl teaches:

web sites that provide information about counterfeiting and penalties (endnotes 11-13, page 15).

It would have been obvious to one of ordinary skill in the art to direct the user of a system like Witschorik and Durst to a website that not only confirms the validity of currency or information about counterfeiting, but also allows the user to provide the would-be counterfeiter with potential penalties for continued passing of false currency. One of ordinary skill would be motivated to look at Witschorik and Durst in light of Gruhl since the system of Durst is used to provide information regarding the document scanned and Witschorik is a system that validates currency over a public network.

As per Claim 23, Gruhl teaches:

web sites that provide guidelines for legitimate use of security document images (endnotes 11-13, page 15).

As per Claim 28, although Witschorik teaches using magnetic information areas (figs. 2a, 2b, and 2c, elements 25a, 25b, 25c) not steganographic data decoded using visible light. But Witschorik teaches that any suitable recordation technology can be



used, col. 3, lines 44-45, and even contemplates using a more desirable alternative in any after rising technology, col. 3, lines 47-51. However, Gruhl teaches an after rising technology suggested by Witschorik that can be applied to currency. Gruhl teaches: wherein said recognizing includes decoding steganographically (imperceptibly embeds, page 3, section 2, second sentence) encoded data from visible light scan data ( Gruhl is trying to solve the problems of using color copiers, page 2, Section entitled Problem), corresponding to said document( see fig 5, page 8).

It would have been obvious to one of ordinary skill in the art to use the imperceptible watermark of Gruhl in the system of Witschorik and Durst to overcome the admitted susceptibility of magnetic data to attack by introducing the patch watermark of Gruhl which can better withstand the attack of counterfeiters particularly when trying to validate older dollars.

Regarding Claim 29, arguments analogous to those presented for Claims 19, 23 and 28 are applicable to Claim 29.

***Allowable Subject Matter***

12. Claims 20-22 are allowed.

Claim 20 of the instant invention recites an automated method comprising:  
recognizing a government-issued security document; and

in response to recognition of such document, contacting a web site that provides information concerning reproduction of the document, wherein the web site informs a user that reproduction of the document is illegal, but offers substitute image data generally corresponding to said document.

The features identified, in combination, are neither discussed nor suggested by the prior arts of record.

Claims 21 and 22 depend on Claim 20, and are therefore allowable.

***Contact Information***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mehrdad Dastouri whose telephone number is (703) 305-2438. The examiner can normally be reached on Monday-Friday, 8:00 am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on (703) 308-6604.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center Customer Service Office whose telephone number is (703) 306-0377.

Mehrdad Dastouri  
Primary Examiner  
Art Unit 2623  
January 21, 2004

**MEHRDAD DASTOURI  
PRIMARY EXAMINER**

*Mehrdad Dastouri*